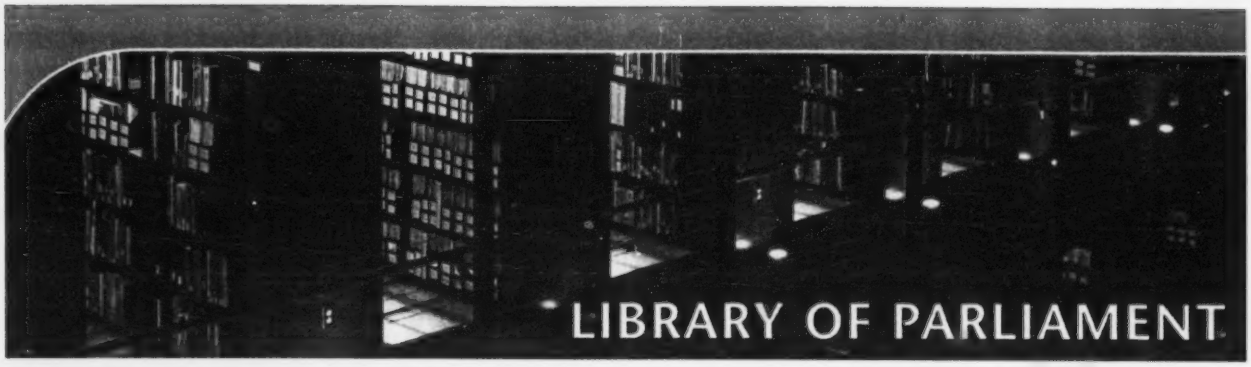

Background Paper

Safe Drinking Water in First Nations Communities

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Safe Drinking Water in First Nations Communities

(Background Paper)

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SAFE DRINKING WATER IN FIRST NATIONS COMMUNITIES

1 INTRODUCTION

Access to safe drinking water is a health and safety issue of critical importance to all Canadians. For many First Nations communities, however, unsafe drinking water is a persistent reality of their daily lives. As of 30 April 2010, 116 First Nations communities were under drinking water advisories; some of them are on long-term drinking water advisories, lasting several years.[1]

On the national stage, the state of drinking water in First Nations communities was brought into stark relief when, in October 2005, nearly 1,000 residents of the Kasheshewan reserve (northern Ontario) were evacuated after the drinking water in their community had tested positive for elevated levels of *Escherichia coli* (E. coli).[2] The dramatic events in Kasheshewan highlighted for Canadians the unacceptable health risks posed by unsafe water quality in many First Nations communities. For Aboriginal people, those events reinforced long-standing and widespread concerns regarding the quality of drinking water on reserves.[3]

This paper briefly describes the roles and responsibilities of the federal and the provincial and territorial governments and First Nations communities with respect to the delivery of drinking water. It then presents recent federal initiatives to address on-reserve water quality issues and outlines some of the key challenges confronting First Nations communities. Finally, proposals to implement a regulatory regime on reserves are summarized and progress achieved to date is assessed.

2 ROLES AND RESPONSIBILITIES: CURRENT COMPLEXITIES

In Canada, water and wastewater operations and systems are generally the responsibility of provincial and territorial governments.[4] Over the years, the different jurisdictions have developed comprehensive regulatory regimes for the "protection of source water, water quality standards, and the oversight of water treatment plants and water delivery services."[5] However, provincial regulatory water standards do not apply to on-reserve First Nations communities. Section 91(24) of the *Constitution Act, 1867*, grants to the federal government exclusive jurisdiction over "Indians and lands reserved for the Indians."[6] As a result, legislative authority for the provision of drinking water to on-reserve First Nations communities vests with the federal government.

At the federal level, three departments are primarily responsible for delivering safe drinking water on reserves: the Department of Indian Affairs and Northern Development, Health Canada, and Environment Canada. Their roles can be summarized as follows:[7]

- The *Department of Indian Affairs and Northern Development* (DIAND) provides funding to First Nations for the provision of water services to First Nations

communities, including capital construction, upgrading and a portion of operating and maintenance costs (80%). It also oversees the design, construction and maintenance of water facilities.

- *Health Canada* ensures the delivery of drinking water monitoring programs on reserves located south of the 60th parallel, either directly or in an oversight role.
- *Environment Canada* is involved in source water protection through its powers to regulate wastewater discharge into federal waters or into water generally where water quality has become a matter of national concern, and to enforce effluent discharge standards into water throughout Canada.

For their part, *First Nations communities*, through their chiefs and councils, are responsible for the design, construction, operation and maintenance of their water systems, for which they assume 20% of the costs. They are also responsible for ensuring that water systems are operated by trained operators as well as for monitoring drinking water quality through effective sampling and testing programs.

The current framework for the provision of safe drinking water on reserves has been strongly criticized for creating ambiguity with regard to roles and responsibilities, including who has ultimate responsibility for assuring water quality. This issue of accountability came to the fore during the Kasheshewan crisis when, in an unusual move, the Ontario minister of Aboriginal Affairs, rather than the federal minister of Indian Affairs and Northern Development, ordered the community's evacuation.[8] In its 2006 report, the Expert Panel on Safe Drinking Water for First Nations suggested the following:

> The current situation can be described as consisting of a number of parties whose roles and responsibilities are bound by government policies and contribution agreements. These arrangements are neither comprehensive nor easily deciphered; most critically, there are numerous gaps and a lack of uniform standards, as well as enforcement and accountability mechanisms.[9]

The Institute on Governance has also characterized the current framework as "a governance problem of major complexity,"[10] stressing that no regulations require the monitoring of drinking water quality and safety in First Nations communities beyond what is set out in federal policies, administrative guidelines and funding arrangements. Similarly, the Commissioner of the Environment and Sustainable Development (CEASD) stated in her 2005 report that while DIAND attempts to fill this regulatory gap by referencing provincial standards and regulations in its policies and guidelines, important elements are missing and the guidelines are not consistently implemented.[11]

The current ambiguity also leaves unresolved issues of enforcement. For example, under the federal Guidelines for Canadian Drinking Water Quality, First Nations are required to sample and test drinking water for potential bacteriological contamination. However, Health Canada – which supports First Nations in the monitoring and testing of tap water through the Drinking Water Safety Program – has no regulation-based enforcement or inspection powers to ensure that tests are carried out. The only consequence for failing to test is the possible withholding of funds provided to First Nations for this purpose.[12]

3 FEDERAL INITIATIVES AND FUNDING

In recent years, the federal government has implemented a number of initiatives to address on-reserve water quality issues and has made substantive investments in this area. In 2003, partly in response to the Walkerton Commission of Inquiry, which examined the contamination of the Walkerton, Ontario, water supply in 2000, the federal government established the First Nations Water Management Strategy (FNWMS).[13] The strategy, which expired in March 2008, was based on a multiple-barrier approach[14] (source to tap) and allocated $600 million in new funding over five years to improve the quality of water and wastewater treatment in First Nations communities.

In March 2006, then Minister of Indian Affairs and Northern Development, the Honourable Jim Prentice, along with the National Chief of the Assembly of First Nations (AFN), Phil Fontaine, announced the Plan of Action for Drinking Water in First Nations Communities. In Budget 2006, the federal government committed $60 million over two years (to coincide with the termination of the FNWMS) in additional funding to support the plan. According to government documents, the plan of action follows the multi-barrier approach adopted by the FNWMS, but places "added emphasis and action on expanding upon the key points that would have the most impact on reducing the risk ranking of water systems in First Nations communities."[15]

Key components of the plan of action include these:

- The implementation of the *Protocol for Safe Drinking Water for First Nations Communities*. This protocol contains standards for the design, construction, operation, maintenance and monitoring of drinking water systems in First Nations communities and is intended for use by First Nations staff responsible for water systems.
- Mandatory training for all treatment-plant operators and a regime to ensure that all water systems are overseen by certified operators. Various initiatives such as remote monitoring of water systems and the contracting of independent certified operators to provide necessary oversight will be put in place.
- Complete specific remedial plans for First Nations communities with serious water issues, starting with the 21 communities most at risk.
- A panel of experts to advise on the appropriate regulatory framework, including new legislation, developed with all partners.
- A clear commitment to report regularly on progress.[16]

In June 2006, as part of its Plan of Action, the federal government established the Expert Panel on Safe Drinking Water for First Nations. Its mandate was to examine options for a regulatory framework.[17]

In Budget 2008, an additional $330 million was committed over two years to improve access to safe drinking water on reserves. And in April 2008, the government announced further enhancements to its March 2006 Plan of Action. The

First Nations Water and Wastewater Action Plan, led jointly by DIAND and Health Canada, added several program enhancements to the original plan, including:

- a national engineering assessment to determine the state of existing water and wastewater facilities. The assessment, to be completed in 2009, will propose solutions for every First Nations community in Canada;
- consultations on a new federal legislative framework for safe drinking water;
- doubling of the funding for the Circuit Rider Training Program in an effort to increase the number of Circuit Rider trainers from about 44 to over 70;[18]
- modification of existing policies and development of a protocol to facilitate investments in small water systems for such innovations as individual and community wells, trucked water, septic systems or agreements with neighbouring municipalities to buy or provide water/wastewater services;
- investments in a National Wastewater Program; and
- waterborne illness procedures.[19]

Budget 2010 renewed the First Nations Water and Wastewater Action Plan, committing a further $330 million over two years for this purpose. This funding allocation followed a $165 million investment in Budget 2009 towards building or upgrading 18 water and wastewater infrastructure projects on reserves.

The 2005 CEASD report estimated that the federal government spent about $1.9 billion between 1995 and 2003 on water and wastewater systems on reserves, most of it on drinking water.[20] According to departmental documents, combined federal investments in relation to First Nations drinking water totalled $1.6 billion throughout the 2003 to 2008 period.

4 KEY CHALLENGES

Despite considerable federal investment, the quality of safe, potable water on reserves is still an ongoing issue, and the design, construction, operation, and maintenance of many water systems on many First Nations reserves remain deficient. Some of the challenges experienced by First Nations communities are similar to those in rural communities with small water systems.[21] However, many First Nations experience additional difficulties as well. Core issues relating to the provision of safe drinking water include the high costs of equipment for and construction and maintenance of facilities in remote locations; limited local capacity and ability to retain qualified operators; the absence of a regulatory framework; the lack of resources to properly fund system operation and maintenance; and the lack of clarity regarding roles and responsibilities.[22]

The Walkerton Inquiry summarized some of the key challenges facing the delivery of safe drinking water in First Nations communities as follows:

- Infrastructure is either obsolete, entirely absent, inappropriate, or of low quality.

- Not enough operators are adequately trained or certified.
- Testing and inspections are inadequate.
- Microbial contamination is frequent.
- Distribution systems, especially on reserves, are sized to deliver about half the water per capita available to other Ontarians.[23]

In its 2002 report on drinking water in First Nations communities, the Institute on Governance noted additional problems with the delivery of safe drinking water on reserves:

- There is no effective legislative base for regulating potable water on reserve.
- There is a lack of clarity with regard to roles and responsibilities.
- There is not a federal requirement to inform First Nations citizens of the results of water testing.
- The nature and frequency of water testing in First Nations communities does not always comply with federal guidelines.[24]

The funding situation fosters difficulties as well. DIAND provides First Nations with only 80% of the operating and maintenance costs for on-reserve water systems. First Nations communities must pay the other 20%. The Expert Panel on Safe Drinking Water for First Nations found that for "many communities, finding the funds to cover the portion of O&M not provided by INAC is a serious problem."[25] According to a report prepared by the Polaris Institute, in collaboration with the Assembly of First Nations, one of the principal reasons that water treatment systems on reserves are inadequate relates to the financial capability of some First Nations to cover those additional costs.[26]

Skills and technical capacity are also raised as important concerns. For example, the 2005 CEASD report suggests that most treatment plant operators do not possess the knowledge and skills required to operate their plants safely and that it is difficult to ascertain whether, in all cases, the level of certification attained by operators matches the level of complexity of their water treatment plants. The report recommended the establishment of an institution, or institutions, to consolidate capacity-building and support functions for all First Nations, stating:

> The technical help available to First Nations to support and develop their capacity to deliver safe drinking water is fragmented. Given that most First Nations communities have fewer than 500 residents, and that providing drinking water has become more complex, the development of institutions that can provide ongoing technical support is critical to a continuing supply of safe drinking water for these communities.[27]

Similarly, the Assembly of First Nations identifies the issue of capacity as one critical to First Nations communities and key to ensuring the delivery of safe drinking water. Although the DIAND'S 2006 *Protocol for Safe Drinking Water for First Nations Communities* requires that every First Nations community have a certified water systems operator,[28] approximately only 37% of operators are certified.[29] Training and

retaining certified water systems operators is an enormous challenge, especially in rural and remote regions. To address this issue, DIAND'S Circuit Rider Training Program (CRTP) provides an experienced water systems operator, or Circuit Rider, on site in the community to support the water treatment plant operator.

In its 2005 audit, however, the Office of the CEASD found that DIAND'S programs are limited in scope and that the technical support available to First Nations to operate and manage water systems is often fragmented and inadequate.[30] The AFN is also critical of the CRTP, despite the recent expansion of the program to ensure it is available to all First Nations.[31] The AFN describes these measures as short-term solutions to a much larger problem.[32] This view is supported by the CEASD, who found that much of the circuit trainers' time is spent troubleshooting rather than providing training.

5 ADDRESSING THE ON-RESERVE REGULATORY GAP: KEY CONSIDERATIONS

As mentioned above, currently no regulations require that drinking water quality and safety in First Nations communities be monitored beyond what is set out in federal policies, administrative guidelines, and funding arrangements.[33] There is broad consensus among Aboriginal leaders and government officials that the absence of a regulatory framework to govern the delivery of safe drinking water on reserves has resulted in serious problems.

The Expert Panel on Safe Drinking Water for First Nations identified three preconditions to ensure the success of any regulatory regime. They are:

- closing the resource gap;
- consultations with First Nations; and,
- addressing the situations in high-risk communities immediately.

5.1 Legislative Options

The panel then explored five legislative options as possible routes to regulating drinking water on reserve. They are:

- applying provincial laws of general application;
- introducing federal regulations pursuant to existing federal statutes, including federal laws that authorize First Nations to pass laws on water;
- passing a new federal Act;
- incorporating provincial water laws into new federal legislation; and
- applying asserted First Nations jurisdiction and customary laws.

The first two options – the application of existing provincial regimes as "laws of general application" under section 88 of the *Indian Act* or passing regulations under

existing federal statutes – were considered attractive because they could be quickly enacted. However, the panel ultimately rejected them, observing that section 88 has been limited by the courts to areas involving "Indianness" and that existing federal statutes are not broad enough to cover a modern regulatory regime.[34] The remaining three options – creating a new federal Act, incorporating provincial water laws into new federal legislation and applying asserted First Nations jurisdiction and customary law – were deemed most workable.

Of these three most viable options, the panel appeared to favour the creation of a new federal statute establishing a single water standards regime. Applying customary law, the panel noted, could create "uncertainty, both in terms of how to get a comprehensive modern water regime and how long the process might take."[35] The panel also identified some drawbacks to incorporating provincial regimes into new federal legislation, notably, the possibility that varying standards across provinces and territories could lead to uneven results, with some reserve communities receiving the benefits of a more elaborate provincial regime than others; First Nations' low acceptance of provincial regimes; and the complexity of involving another level of government in water management.[36]

The Assembly of First Nations conducted its own review of the panel's proposed options and suggested an alternative route: the application of a federal regime as an interim measure for the provision of national standards for safe drinking water until First Nations governments are ready to exercise their own jurisdiction over water management.[37] The AFN has expressed concern that none of the panel's proposed options recognizes First Nations' inherent jurisdiction, clarifies roles and responsibilities or elucidates the potential impact on section 35 rights.[38] The AFN also takes the view that incorporating provincial water laws into a federal regime could affect First Nations rights more extensively than would the other options. In testimony to the Senate Aboriginal Peoples Committee, officials from the AFN expressed their unease with this option, especially around the issue of enforcement, stating that:

> The First Nations really object to having someone from the province come into a First Nations jurisdiction and say, the province will now enforce a provincial law. Our leadership would have a hard time accepting this approach and it is a bone of contention.[39]

Despite the panel's findings and the objections of the AFN, DIAND officials have signalled their intent to proceed with legislation to regulate safe drinking water on reserves by incorporating provincial water laws into new federal legislation.[40]

5.2 Adequate Funding

The view of the Expert Panel on Safe Drinking Water for First Nations is that regulation alone will not ensure safe drinking water. The panel's report states that regulation must be coupled with adequate investment in human resources and physical assets. According to the panel, forcing First Nations to adopt the standard of care required of other jurisdictions, with its accompanying liabilities, without providing the training and resources to meet new and higher standards will justly be

resisted. The panel's members suggest that it is not "credible to go forward with any regulatory regime without adequate capacity to satisfy the regulatory requirements."[41] They also say that "regulation without the investment needed to build capacity may even put drinking water at risk by diverting badly needed resources into regulatory frameworks and compliance costs."[42]

The May 2007 report of the Standing Senate Committee on Aboriginal Peoples, entitled *Safe Drinking Water in First Nations Communities*, supported the position taken by the panel members regarding the need for adequate funding. The committee's report found that while a regulatory regime governing the delivery of safe drinking water is important, regulatory standards without the physical and human capacity to meet them, is "unlikely to improve the quality and delivery of drinking water on-reserve, and may in fact worsen the situation."[43]

In written submissions to the panel, many First Nations people indicated that their water systems must be brought up to clear standards *before* a legislated regulatory regime is put in place.[44] Failure to do so, some argued, could result in a risk to communities that are unable to comply with legislated standards as a result of deficiencies in their existing water systems and/or the lack of trained operators to manage those systems. For example, the Quebec Native Women's Association remarked:

> The last thing Aboriginal governments need is for jurisdiction to be passed on to them without adequate resources, training or infrastructure. This would only result in shifting the problems with water management to our governments.[45]

The Institute on Governance, which advocates for a federal "Safe Water Act," also remarked on the need for an appropriate funding strategy to ensure that First Nations water systems facilities are brought up to a level where they can meet legislated standards. In its report, the Institute observes that there is "no point adopting a federal Safe Water Act if a significant portion of existing water plants on reserve can not meet current standards."[46]

The precise level of investment needed to ensure that water systems, including their operations are brought up to acceptable standards is uncertain. According to departmental documents, DIAND is still in the process of determining the exact amount of funding required to address deficiencies in First Nations water and wastewater systems.[47]

5.3 Consultations

The Expert Panel on Safe Drinking Water for First Nations was explicit that its hearings were not to be understood as broad consultation, but rather as "an effort to gain a better understanding of the existing challenges, possible regulatory directions, obstacles to effective regulation, and related issues that have an impact on water quality."[48] It went on to add that "meaningful discussion between the federal government and First Nations is necessary if any action to improve the safety of water on reserves is to be effective and responsive."[49] Similarly, the Assembly of First

Nations has stated that it expects the "Minister will consult the National Chief prior to a decision on which recommendation he will support" and that it "will insist on an extensive consultation process, with involvement from the AFN and regional offices, on the Expert Panel recommendations."[50]

In April 2007, DIAND held a joint workshop on water legislation with the Assembly of First Nations Technical Water Expert Group. The purpose of the workshop was to engage AFN technical experts on DIAND'S preference for proceeding with a federal statute incorporating provincial regulations and to identify issues and challenges that would need to be addressed with respect to this option.

Budget 2008 included an announcement that the federal government would undertake consultations with First Nations and provincial and territorial governments on the development of a regulatory regime to oversee water quality on reserves.[51] Subsequently, a commitment to launch a consultative process on the "scope and elements of a proposed legislative framework" on water and wastewater systems in First Nations communities was announced in January 2009.[52] From February to March 2009, the government held 13 engagement sessions across the country on the development of this legislative framework.[53] A discussion paper prepared for the engagement sessions indicates that participants will be "encouraged to discuss and provide input on the federal government's preferred option of incorporating by reference (reproducing) provincial/territorial regulations."[54] As previously noted, however, both the report of the Expert Panel on Safe Drinking Water for First Nations and the May 2007 report of the Senate Committee on Aboriginal Peoples expressed strong concerns about the viability of this legislative option, noting, in particular, the potential to create an uneven patchwork of regulations across the country and the likely resistance of First Nations to this approach.

5.4 Elements of a Legislative Framework

In its examination of legislative options, the Expert Panel argued that any proposed legislation confined narrowly to drinking water would miss several closely related issues, including source water protection, clarification of roles and responsibilities for on-reserve water management, mechanisms for cooperation with other jurisdictions and enforcement of new standards.

In volume 2 of their report, panel members set out the possible elements of a legislative framework, including the role and functions of a First Nations Water Commission. The commission, and an associated appeals tribunal, would be responsible for inspections and holding particular parties, including federal agencies, to account. The view of the panel is that this would help to bind the current multi-party system and shift the enforcement of rules away from the funding providers, thus avoiding potential conflicts of interest.

The inclusion of source water is also significant. Aboriginal groups have long advocated for a meaningful role in watershed protection, arguing that control of water within First Nations boundaries is meaningless, without input on the protection of water in surrounding watersheds. This view supports the recommendation of the

Walkerton Inquiry that Ontario First Nations should be invited to join in the watershed process:

> [M]ulti-stakeholder planning on a watershed basis is the key to source water protection. It is vital that First Nations be at the table when the resources they share with the rest of the community are at issue. Waters flow onto the reserve and off, carrying their particular loads of contaminants. No one in a watershed should be required to import a problem from, or be able to export a problem to, a neighbour.[55]

Currently, there is no mechanism for First Nations to provide input on regulations related to watershed management, since these are developed by a committee of federal, provincial and territorial officials.

6 REPORTING ON PROGRESS

As part of the federal government's 2006 Plan of Action, a commitment was made to report to Parliament regularly on the state of drinking water on reserves. The first progress report was tabled on 22 March 2007;[56] the most recent progress report was tabled in April 2009.[57] Together, the government's progress reports suggest that there has been a steady reduction in the number of high-risk community water systems and priority communities.[58] According to the reports:

- As of March 2009, the water systems of 48 First Nations communities were classified as high risk, down from 97 in 2007 and 193 in 2006;
- In March 2007, 121 communities were identified as having high-risk drinking water systems and/or drinking water advisories. The March 2009 progress report placed the number of communities in this category at 60.
- In March 2006, 21 communities were identified as priorities; as of March 2009, four were still considered to be priority communities. Those removed from the list have had their drinking water advisories lifted and/or the risk level of their water systems reduced.

The government's figures, however, have been sharply criticized. On 29 March 2007, in his appearance before the House of Commons Standing Committee on Aboriginal Affairs and Northern Development, the National Chief of the AFN questioned the results of DIAND's March 2006 progress report, stating that such reports were part of an "internal reporting mechanism of the Department of Indian Affairs," were "not subject to an independent risk assessment" and were therefore "entirely subjective."[59] In a similar vein, the Expert Panel on Safe Drinking Water for First Nations observed that there are communities that fail to appear on DIAND's risk assessment because they have no water systems at all and that good measurement is generally lacking.

Similarly, the Senate Committee on Aboriginal Peoples 2007 report, *Safe Drinking Water for First Nations on Reserve*, found that DIAND was unable to identify the existing physical and human resource needs for the delivery of safe drinking water on reserves or to identify deficiencies in those areas with any great degree of certainty.

As a result, the committee expressed strong concern that Parliament is not receiving full and accurate information about the quality and safety of drinking water on reserves. Accordingly, the report recommended that DIAND provide for an independent needs assessment of both the physical assets and human resources of individual First Nations communities in relation to the delivery of safe drinking water, and the tabling of that assessment in Parliament.[60]

The government's 2008 progress report indicated that DIAND was preparing a national assessment of all water and wastewater operations which would take place throughout 2008 and 2009. It also signalled that legislation would be introduced on the government's preferred legislative approach to regulating water and wastewater systems in First Nations communities once the engagement sessions were completed.

7 CONCLUSION

The delivery of safe drinking water to on-reserve First Nations communities is critical to the health and safety of the communities' residents. Access to safe, clean, potable water is also closely tied to the economic viability of individual communities. In recent years, the federal government has provided additional funding and implemented a number of initiatives to deal with on-reserve water quality issues. In 2007, it announced plans to bring forward water standards legislation, comparable to those in other jurisdictions, to fill the existing regulatory gap governing the provision of drinking water on reserves. On 26 May 2010, the federal government introduced legislation for the development of federal regulations governing the provision of safe drinking water on reserve. Bill S-11, An Act respecting the safety of drinking water on first nation lands, is currently before the Senate.[61]

NOTES

1. For information on the number of First Nations communities under boil water advisories, consult Health Canada, *First Nations, Inuit and Aboriginal Health*, "Drinking Water Advisories – How many First Nations communities are under a Drinking Water Advisory?"
2. Residents of this small, fly-in northern Ontario community, located on the shores of James Bay, had been under a boil water advisory since 1996. Laura Eggertson, Canadian Medical Association Journal, *Safe Drinking Water Standards for First Nations Communities*, 2007.
3. The Polaris Institute, in collaboration with the Assembly of First Nations, released a report in May 2008 which profiled the state of drinking water in six First Nations communities. Polaris Institute, *Boiling Point! Six community profiles of the water crisis facing First Nations Within Canada*, May 2008.
4. *Report of the Expert Panel on Safe Drinking Water for First Nations* [Expert Panel], Vol. 1, Department of Indian Affairs and Northern Development, November 2006, p. 16.
5. Dean Watt, "Water, water everywhere, nor any drop to drink," *LawNow*, September/October, 2008.

6. For additional information on jurisdictional issues see Tonina Simeone, *Federal-Provincial Jurisdiction and Aboriginal Peoples*, TIPS-88E, Parliamentary Information and Research Service, Library of Parliament, Ottawa, 1 February 2001.

7. Department of Indian Affairs and Northern Development, *Improving Water Quality On-reserve: Roles and Responsibilities*, Fact Sheet, 21 March 2006.

8. "Ottawa 'missing in action' over reserve's bad water: McGuinty," *CBC News.ca*, 26 October 2005.

9. Expert Panel (2006), Vol. 2, p. 1. Importantly, among its findings, the report of the panel concluded that any proposed legislative framework to govern the delivery of water on First Nations reserve must clarify existing roles and responsibilities.

10. Institute on Governance, *Safe Water for First Nations Communities: Learning the Lessons from Walkerton*, 15 September 2002, p. 9.

11. Commissioner of the Environment and Sustainable Development, Chapter 5, "Drinking Water in First Nations Communities" in *2005 Report of the Commissioner of the Environment and Sustainable Development to the House of Commons* [CEASD report], Office of the Auditor General of Canada, Ottawa, 2005.

12. Ibid., p. 12.

13. See Indian and Northern Affairs Canada [INAC], *First Nations Water Management Strategy*.

14. Health Canada, *Environmental and Workplace Health*, "The Multi-Barrier Approach to Safe Drinking Water."

15. INAC, *Plan of Action for Drinking Water in First Nations Communities: Progress Report – January 17, 2008*.

16. For additional information please see INAC, "Government Announces Immediate Action on First Nations Drinking Water," News release, Ottawa, 21 March 2006.

17. The panel held a series of public hearings across Canada throughout the summer of 2006 and tabled its report in November 2006.

18. The Circuit Rider Training Program provides an experienced water system operator, or Circuit Roder, on site in the First Nations community to support the water treatment plant operator.

19. See INAC, "Government of Canada Announces Next Important Steps to Improve Drinking Water in First Nations Communities," Backgrounder, 15 April 2008.

20. CEASD report (2005), p. 6.

21. Watt (2008).

22. Senate, Standing Committee on Aboriginal Peoples, *Minutes of Proceedings*, 1st Session, 39th Parliament, 2 May 2007, 15:43–15:59 (Christine Cram, Associate Deputy Minister, Socio-economic Policy and Regional Operations Sector, Department of Indian Affairs and Northern Development).

23. Dennis R. O'Connor, *Report of the Walkerton Inquiry: A Strategy for Safe Drinking Water* [Walkerton Inquiry], Part Two, Ministry of the Attorney General [Ontario], 2002, p. 486.

24. Institute on Governance (2002), pp. 1–2.

25. Expert Panel (2006), Vol. 1, p. 29.

26. Polaris Institute (2008), p. 7. The Commissioner of the Environment and Sustainable Development also recognized the issue of First Nations' financial capability to cover the 20% of operating costs not funded by the Department of Indian Affairs and Northern Development.

27. CEASD report (2005), Chapter 5, p. 2.

28. INAC, *Protocol for Safe Drinking Water in First Nations Communities*, 21 March 2006.

29. Senate, Standing Committee on Aboriginal Peoples, *Minutes of Proceedings*, 1st Session, 39th Parliament, 2 May 2007, 15:43–15:59 (Christine Cram, Associate Deputy Minister, Socio-economic Policy and Regional Operations Sector, Department of Indian Affairs and Northern Development).

30. CEASD report (2005), p. 17.

31. INAC, *Plan of Action for Drinking Water in First Nations Communities – Progress Report, March 22, 2007*, Ottawa, 2007.

32. Senate, Standing Committee on Aboriginal Peoples, *Minutes of Proceedings*, 1st Session, 39th Parliament, 16 May 2007, Richard Jock, Chief Executive Officer, Assembly of First Nations, 16 May 2007.

33. The 2005 CAESD report found that while the Department of Indian Affairs and Northern Development attempts to fill this regulatory gap by referencing provincial standards and regulations in its policies and guidelines, important elements are missing and the guidelines are not consistently implemented.

34. Expert Panel (2006), Vol. 2. See, in particular, section 3.

35. Expert Panel (2006), Vol. 1, p. 59.

36. Ibid.

37. Assembly of First Nations [AFN], *Expert Panel Report on Safe Drinking Water for First Nations – Position Paper*, January 2007.

38. Section 35 of the *Constitution Act, 1982* "recognizes and affirms" Aboriginal and treaty rights that now exist or that may be acquired by way of land claims agreements. By the terms of the Act, Aboriginal rights apply to Indian, Inuit and Métis peoples of Canada and "are guaranteed equally to male and female persons."

39. Senate, Standing Committee on Aboriginal Peoples, *Minutes of Proceedings*, 1st Session, 39th Parliament, 16 May 2007, 16:30 (Earl Commanda, Director of Housing, Assembly of First Nations).

40. Senate, Standing Committee on Aboriginal Peoples, *Minutes of Proceedings*, 1st Session, 39th Parliament, 2 May 2007, 15:43–15:59 (Christine Cram, Associate Deputy Minister, Socio-economic Policy and Regional Operations Sector, Department of Indian Affairs and Northern Development). See also INAC, *Drinking Water and Wastewater in First Nation Communities – Discussion Paper: Engagement Sessions on the Development of a Proposed Legislative Framework for Drinking Water and Wastewater in First Nation Communities*, Winter 2009.

41. Expert Panel (2006), Vol. 1, p. 49.

42. Expert Panel (2006), Vol. 1, p. 18.

43. Standing Senate Committee on Aboriginal Peoples, *Safe Drinking Water for First Nations*, May 2007, p. 3.

44. Written submissions to the Expert Panel on Safe Drinking Water for First Nations are available online at Government of Canada, *Safe Drinking Water for First Nations*, "Submissions for consideration."

45. Quebec Native Women Inc., *Brief on Drinking Water*, 30 August 2006, p. 7.

46. Institute on Governance (2002), p. 9.

47. Senate, Standing Committee on Aboriginal Peoples, *Submission of the Department of Indian Affairs and Northern Development*, May 2007. A copy of this submission is available from the author of this publication.

48. Expert Panel (2006), Vol. 1, p. 3.

49. Ibid., p. 51.

50. Assembly of First Nations, "First Nations Water Initiative," 2006.

51. Department of Finance Canada, Budget 2008, 26 February 2008, p. 158.

52. INAC, "Government of Canada Takes More Action to Clean Up Drinking Water in First Nation Communities," News release, 20 January 2009.

53. Summary reports of the regional engagement sessions can be consulted at Assembly of First Nations, *Water*, "Proposed Federal Legislation for Drinking Water and Wastewater in First Nation Communities." These reports do not appear to be available on the INAC website.

54. INAC, *Discussion Paper: Engagement Sessions on the Development of a Proposed Legislative Framework for Drinking Water and Wastewater in First Nation Communities*, Winter 2009, p. 3.

55. Walkerton Inquiry (2002), p. 494.

56. INAC, *Plan of Action for Drinking Water in First Nations Communities – Progress Report, March 22, 2007*, Ottawa, 2007.

57. See the progress reports on the delivery of safe drinking water on reserve.

58. The Department of Indian Affairs and Northern Development defines priority communities as those communities that have both high-risk drinking water systems and a drinking water advisory.

59. House of Commons, Standing Committee on Aboriginal Affairs and Northern Development, *Evidence*, 1st Session, 39th Parliament, 29 March 2007, p. 8 (Chief Phil Fontaine).

60. Standing Senate Committee on Aboriginal Peoples, *Safe Drinking Water for First Nations*, May 2007, p. 3.

61. See Bill S-11, An Act respecting the safety of drinking water on first nation lands, 3rd Session, 40th Parliament.